ABSRACT OF THE DISCLOSURE

In a data reproduction method and apparatus of the present invention, a Viterbi detection unit is provided, the Viterbi detection unit having a plurality of detectors each providing a first partial response signal with a first constraint length from a first sequence of samples derived from a first readout signal. One of connection and disconnection of the plurality of detectors in the Viterbi detection unit is selected in response to a timing signal, wherein, when the connection of the plurality of detectors is selected, the Viterbi detection unit provides a second partial response signal with a second constraint length from a second sequence of samples derived from a second readout signal, the second constraint length being different from the first constraint length.